

A Demonstration in the Organization of Community Health Resources in Rural Pennsylvania

A. L. CHAPMAN, M.D.

A DEMONSTRATION in the organization of community health resources in a rural area was launched on May 8, 1967. On that date the Division of Community Health Services (now the Community Health Service), Health Services and Mental Health Administration, contracted with the Pennsylvania Department of Health to conduct the demonstration project, which would cover a span of 26 months. The demonstration had three purposes.

1. To develop local community organizations in a rural area in order to identify and coordinate existing community health services and to plan and implement supplemental programs.

Dr. Chapman is director of the bureau of planning, evaluation, and research, Commonwealth of Pennsylvania Department of Health. The project described in this paper was supported by grant No. PH-110-257. Tear-sheet requests to A. L. Chapman, M.D., Commonwealth of Pennsylvania Department of Health, P.O. Box 90, Harrisburg, Pa. 17120.

2. To demonstrate that, through committee participation, community leaders will become familiar with and interested in health needs, methods of obtaining financial support, and procedures for implementation of program plans.

3. To test a demonstration system for the delivery of health services to rural areas based on self-supportive community action and to report findings which may be used in planning health services for similar rural areas.

These goals were substantially met. Through committee organization local problems were identified, priorities were set, and the most feasible methods of obtaining financial support were determined.

A carefully planned questionnaire survey of 1,000 representative households was conducted to determine how rural people felt about their own health needs and problems.

Task forces were established under local leadership to evaluate identified problems such as the need to improve emergency health services, the need to coordinate and expand home health

services, and the need to provide comprehensive dental care to all children in the area. Task force activity has continued following the conclusion of the 26-month study. New task forces have been established.

The Area

Chosen for the demonstration were five counties in central Pennsylvania—Montour, Columbia, Northumberland, Snyder, and Union. A profile of the area was developed by the staff of the Division of Behavioral Science of the Pennsylvania Department of Health.

From 1940 to 1960 the area's population declined from 234,000 to 225,000. The loss was greatest in Northumberland—predominantly a mining county. A population of this size could well be served by a full-time multicounty health department. The population density was 132 persons per square mile compared with a State average of 251. About 10 percent of the residents lived on farms and 47 percent in nonfarm rural areas. The remainder lived in towns scattered along the major highways.

The average age of residents was higher than that of the State as a whole. The educational level was lower, although two universities and one college are located in the area. Average income was lower than the State average, the death rate was 6.4 percent higher than the State's, and the birth rate was 7.1 percent lower.

The five counties boast six general hospitals with a total capacity of 973 beds, two health-related State special schools and hospitals, and a State mental institution. The largest of these six general hospitals, Geisinger Medical Center, is located in the small town of Danville. It is a closed staff, group practice hospital with a staff of 82 full-time physicians including residents and interns. The remaining hospitals are smaller community hospitals that do not have interns or residents. A survey showed that 87 percent of the local residents, when hospitalized, chose a hospital in the area.

Ambulance service is provided by 39 ambulances operated by 24 volunteer ambulance companies. The majority of the volunteers have received basic first aid training. The ambulance services are financed largely by fees collected from residents on a voluntary basis.

There are no full-time health departments in the counties. Basic public health services, principally environmental health and public health nursing services, are provided by the State department of health which maintains a regional office that covers 15 counties. Basic services are provided by a small staff of sanitarians and public health nurses located in State offices in each county. Backup services are provided from the regional office.

The physician to population

ratio for Pennsylvania in 1970 was one physician for every 645 people; the ratio in the five-county area was one to 778. The dentist to population ratio was also low—for the State, one to 1,807, for the five-county area, one to 2,178.

The Project

The part-time project director and the full-time project coordinator were located in Harrisburg. A field director, behavioral scientist, and secretary were housed in the offices of the Susquehanna Economic Development Association (SEDA) in Lewisburg in the center of the five counties. As they were recruited, the field staff began identifying community lay and professional leaders who were willing and able to contribute to the project.

A professional advisory committee was established first. It consisted of 10 professional people from the five counties—several physicians, a dentist, an educator, a nurse, several hospital administrators, an executive secretary of a voluntary health agency, a lawyer, and an official of a local radio station. The members of this committee met monthly. They served as the steering committee of a larger consumer-oriented areawide planning committee. Members of the professional advisory committee, all busy people, were conscientious in attending meetings and zealous in discharging their various self-imposed assignments.

In spring 1968, an areawide planning committee with 35 members was established. More than half were classified as consumers of health services. The working definition of a consumer was a person who did not earn a livelihood as a full-time health worker.

Among the persons on the areawide planning committee were three businessmen, the director of public relations of a local radio station, a postmaster, a housewife, a school principal, two attorneys, a clothing manufacturer, a pharmacist, a funeral director, the director of child welfare services, a consulting engineer, the administrator of a nursing home, the director of the Susquehanna Valley Economic Development Association, and representatives of the agricultural extension service, a county board of assistance, the bureau of employment security, and a family service agency. Remaining members were professional persons—physicians, nurses, dentists, and hospital administrators.

The members were selected from a roster of interested and qualified candidates identified through the efforts of the field staff of the project and through members of the professional advisory committee. Members of the planning committee met bimonthly until the Susquehanna Valley Rural Health Institute was incorporated and a board of directors was elected. (Many of the committee members are now active members of task forces and subcommittees established under the aegis of the institute.)

Because these committee members came from all walks of life and from all parts of the area, they brought to committee and task force meetings a breadth of viewpoint that could not have been obtained in any other way. They represented real grassroots opinion. One hope of the project's sponsors was that these local members would not only provide valid inputs into committee deliberations but that they would also serve as local sponsors for ideas generated by the

project. They are doing so—as individuals, as members of committees, and as members of task forces.

As the groundwork was being laid for conducting the household survey, three task forces were established, one on emergency health services, one on home health services, and one on comprehensive dental care.

Field staff for the task force on emergency health services surveyed all ambulance companies and the emergency services of local hospitals. Using the resulting data, a model emergency health service system for the area was devised. Funds are now being sought to implement it.

The home health services task force has identified agencies providing these services and, through the technique of agency involvement, is persuading the agencies to consolidate supervisory staff and home nursing activities. The Federal Regional Medical Programs Service has made grants to the two home health service agencies now operating in the five counties.

A task force led by a local dentist is exploring ways to provide comprehensive dental care to residents of the area. Emphasis will be placed on dental prophylaxis and complete care services for children.

The Household Survey

The household survey was conducted by four students at Bucknell University who were selected and given interview training by a professor of psychology at the university. A behavioral scientist on the project staff supervised the students. Interviewing began in July 1968 and was concluded in September.

This cross-sectional survey was based on a random sample of

dwelling units on the tax records in the project area. The selection of a sample of households was made randomly from the tax records maintained in each county courthouse.

The survey was designed to be descriptive and not explanatory. The particular use of the data was left in the hands of the decision makers who sponsored the project.

The questionnaire was designed by the staff of the Division of Behavioral Science, Pennsylvania Department of Health. It consisted of 26 mimeographed sheets. The questions concerned family characteristics, condition of housing and premises, use of physicians and dentists, acute illness or injury, short-term hospitalization, chronic or long-term hospitalization, and preventive care.

Cooperation of family members queried was excellent. The refusal or failure rate was 9.3 percent. This cooperation was due in part to the widespread publicity about the survey's purposes and procedures, including interview time schedules, on the radio and in the local press.

The average interview lasted 1 or 1½ hours. About 75 percent of the interviews involved, at best, one repeat visit.

Following are some highlights of the survey's results:

1. The shortage of physicians or their unavailability outweighed all other self-perceived community health needs.

2. Cost was listed as the main deterrent to seeking medical care by 38 percent of the respondents.

3. Fear prevented 11 percent of respondents from going to a physician but was even more influential in deterring respondents from seeing a dentist.

4. Personal attention took pre-

cedence over professional competence in determining satisfaction with hospital care.

5. The need for nursing home care was not given high priority.

6. Few of those queried were aware of the activities of voluntary health agencies except for tuberculosis and diabetes screening programs.

7. Ninety-nine percent of the babies were born in hospitals in 1967, and all mothers queried had made at least seven prenatal visits to a physician in that year.

Community Organizations

The evolution of community organizations to promote improved delivery of health care services in the five-county and surrounding area was influenced by numerous factors that eventually will determine the shape a permanent organization will take.

As the 2-year rural health project neared an end, members of both the professional advisory committee and the areawide planning committee were convinced that a structure was needed to maintain the momentum developed by the project.

A new nonprofit corporation, the Susquehanna Valley Rural Health Institute, was officially incorporated on July 14, 1969. Before it could be incorporated a preplanning grant of \$60,000 became available—\$45,000 of this sum was derived from the Appalachian Regional Commission (section 302 Appalachian Redevelopment Act), and \$15,000 came from the Susquehanna Economic Development Association.

The Institute for Medical and Education Research of Geisinger Medical Center agreed to accept and administer this grant for a 1-year period. A staff of three professional persons and a clerk

were employed and located in the SEDA offices.

Meanwhile, representatives from six surrounding counties petitioned for an enlargement of the five-county area to 11 counties. Negotiations to effect this began. During these negotiations a second planning grant of \$50,000 was received from the Appalachian Regional Commission under section 202 of the Appalachian Redevelopment Act. Since the Susquehanna Economic Development Association spanned 15 counties including the 11 counties planning to work together, this second grant was made to SEDA. The staff was enlarged to three professional people, two research assistants, and one clerk.

It was decided to create a new nonprofit corporation, the Central Pennsylvania Health Council, which would serve the needs of the 11 counties. The council will replace the Susquehanna Valley Rural Health Institute. Bylaws have been prepared. Incorporation of the council is anticipated in mid-1971. The six counties that have been added to the five-county area are Tioga, Wyoming, Clinton, Centre, Mifflin, and Juniata.

The purposes of the council, now being defined, will emphasize its role in planning. The council will be involved in collecting and analyzing data concerning health needs and resources; it will assist local groups in attempts to improve the delivery of health care services; and it will coordinate local efforts within the 11-county area.

Constraints

Three constraints on the development of public health services and the modernization of health care delivery services in the five

counties were identified during the course of this demonstration project.

1. One constraint was the limited tax resources available to rural counties and towns, boroughs, and townships within their boundaries. Seventy percent of tax revenues are monopolized by Federal and State governments. Local governments are hard pressed to find funds to finance even the most essential services. Relief must come from Federal and State tax sharing, from regionalization of services and facilities, and from the institution of more efficient and economical methods of providing health services.

2. The second constraint, and a very real one, is the affinity of rural folk for small though picturesque local governments which minimize efficiency and make long-range planning exceedingly difficult. The mounting economic pressure of ever increasing costs will in time bring about an elimination of many of these "too small" local government units.

3. The shortage of qualified health personnel so evident in urban areas is even more acute in rural areas. Means must be found to counteract the attractiveness of urban areas for health personnel so that more of them will be motivated to work in rural areas.

Observations

Several general observations were derived from the experience of the staff in working with rural people.

1. Professional people and residents of the five counties showed a sincere interest in identifying community health problems and in working together in seeking solutions.

2. Rural folk have a well-developed sense of loyalty to their own town or borough, their own high school, the church they belong to, and the diet they eat. They are not prone to embrace change. But, when convinced that change will be beneficial, they will accept it, often with enthusiasm.

3. A narrow tax base and small government units make it difficult to finance new health services and facilities—even to find matching funds for Federal grants.

4. A single multicounty health department serving a population of 225,000 would help bring new health services in a planned way to the area. Lacking funds for such a department, the development of a comprehensive health planning capability through the Central Pennsylvania Health Council would seem to be the best alternative.

5. Fortunately, an improved highway system is increasing the area's attractiveness to industry. More industries mean an increased tax base. Increased taxes, if wisely spent on a regional basis, could provide the potable water, sewage disposal systems, schools, and health care services demanded by additional industries before they will move to rural locations.

6. Rural people are independent, hard working, and competent. They lack resources primarily because the industrial revolution passed them by. They can best be helped to obtain needed health services and facilities by involving them in the search for solutions to their own problems—then helping them to solve their own problems in their own way.